# ABSTRACT

A scalable, multi-protocol mobile switching center in a wireless communications network provides communications control for digital and analog wireless communications devices including devices that operate according to GSM and IS-41 standards. The hardware and software architecture of the switching center is designed so that processing that is unique to a particular protocol is performed at the lowest possible level, and remaining processing can use generic procedures. The switching center incorporates a home location register and visitor location register that are used in conjunction with software applications to determine the protocol of mobile communications devices using the wireless communications network. The mobile switching center can be used to provide a large scale distributed wireless network or a small scale wireless network. The switching center can also be used as an adjunct to a private branch exchange to provide in-building wireless services and call control. Graphical user interfaces make the wireless communications network easy to maintain.